COMPUTATION REDUCTION IN OFDM SYSTEM USING

FREQUENCY DOMAIN PROCESSING

Abstract of the Disclosure

5   Improved systems and methods for implementing Orthogonal Frequency

Division Multiplexing (OFDM) systems and for computing Fast Fourier Transforms

(FFT) having strictly real outputs are provided. Systems and methods are provided for

efficiently implementing an Inverse Fast Fourier Transform (IFFT) with complex inputs

and real outputs. Filtering and upconversion are performed in the frequency domain to

10   simplify digital time domain processing and generally reduce complexity.